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W E E K L Y B U L L E T I N

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE.

SEASON OF 1915. MAY 1 1915.

Reports for week ending May 1, 1915.

Akron.

A heavy rain on Sunday and showers during the week made the ground so wet that very little field work was done. The precipitation for April was 4.89 inches which is 2.10 inches above normal. Small grain is growing rapidly and the prospects for a small grain crop are very good.

Maximum temperature for the week was 76; minimum 43.

Precipitation 1.76 inches.

Mr. R. L. Piemeisel arrived Thursday to start the planting in the Moisture Requirement work.

Amarillo.

Rains in bountiful showers still continue to descend upon us this past week to the extent of 1.87", bringing the total for the month up to 4.89" or 2.94" above normal for April. Sixteen days of the month have been rainy and at no time has there been an interval of more than four days without rain. Field work on the station and the country around here as a result has been at a standstill. The rains have all been of a rather slow driving nature so there has been a minimum of run-off. Soil samplings indicate however, that penetration of the moisture into the soil here is a very slow process.

Maximum temp. for week 85 on the 28th; minimum 45 on the 25th and 30th. Ave. mean temp. 62. Ave. hourly wind velocity 7.2 miles.

Precipitation 1.87 inches.

Evaporation 1.404" by the 6' tank; 1.373" by the 8' tank.

Winter rye commenced to head out Apr. 28. The growth is heavy and it stands up 3' high. W. Wheat is over a foot high and in places presents a lodged appearance on account of the rains. Along the east side where the ground is low and water has been standing on the plats the W. Wheat is turning light in color. This is especially true of Plat A. Plat E appears streaked probably in conformity with the sub-soiled furrows. But whether the tall growth follows the furrows or it is the short growth - is an unanswered question. However, as the tall growth of this plat most nearly resembles that of the other plats it is most likely that the short streaks are due to effects of subsoiling.

The spring grains are making splendid growth and are now 4 to 5 inches in height.

Bellefourche.

The rain of last week left the soil in such a wet condition that it was impossible to resume seeding until Wednesday afternoon. The barley, oats, alfalfa, brome, clover, sweet clover, peas, and flax were seeded on Wednesday and Thursday. Rain on Friday and Saturday stopped field work.

Wheat that was planted on the 21 has emerged. The moist condition of the surface soil insures an almost perfect stand on all plats.

The month of April as a whole has been characterized by the absence of the high winds that generally prevail at this season of the year, and by a precipitation above normal. Total precipitation for month 2.58".

Maximum temp. for week 79; minimum 39. Precipitation .87 inch.

Archer.

Field work has been possible but three days during the past week, due to continued rain. During that time it has rained 2.39 inches, and during the month 4.90 inches. This amount for April, has been equaled but twice, at Cheyenne, during the past 45 years - in 1900 and 1905. There has been considerable run-off this week.

Soil samples have been taken on 25 plats, and it was found that in all cases, spring plowed land was wet down 6 inches deeper than fall plowing; the former averaging 3 feet in depth and the latter 2 feet 6 inches. Summer tilled land is wet down about 3 feet 6 inches, and in some cases into the gravel subsoil which lies about 4 feet deep. There is a distinct line of demarcation between the wet and dry soil.

Spring wheat and oat seeding on the D. L. A. plats was finished on the 29th, but the barley is yet to be planted. Winter wheat is doing well but the stand is very uneven. Winter rye is stooling out and making very rapid growth, being about 5 inches in height. Grass is making rapid growth, during the past week. All the varieties of common spring wheat and oats have been seeded on the plats and most of the nursery wheat and oats are planted. About 10 acres of land have been prepared for increase of Arnautka wheat and Kherson oats.

About 4000 trees have arrived from Garden City which will be planted as a wind break. They are composed largely of pines, arbor vitae, and cotton woods. The evergreens set out last season and the year before are killed back to the ground, and most of the last seasons growth of golden willow has been killed. Cottonwoods survived the winter in good shape.

Maximum temperature for week 71; min. 35. Precipitation 2.39 inches. Ave. wind velocity 9.0 miles.

Ardmore.

Maximum temperature for the week 75; minimum 46. Average wind velocity 7.1 miles per hour. Total precipitation 2.18 inches. Total precipitation for the month of April 4.26 inches. In the total reported for the week there is included 1.55 inches which fell on May 1st. This, of course, is not included in the total for the month of April. The precipitation for April of this year has been the greatest of any single month since this station has been established. For the same month last year it was 5.27 inches, and for the same month in 1913 it was 1.52". During May of 1914 we only had 1.24 inches, and, as reported above, more than this amount fell on the first day of May of the present year.

Hat Creek which flows between the station and the town of Ardmore is entirely out of its banks. The bridge which we use daily is covered with water. Whenever we want to go to town under present conditions we "hike" down and cross over on the railroad bridge. It is very probable that the wagon road bridge will be destroyed, in which case we will have to take a circuitous route of several miles to get to town with a team or automobile.

Wheat, oats and barley are up and looking good. Potatoes were planted this week, and the rotation plats of Canada Field Peas were seeded. If the ground is not too wet, part of our corn and sorghum will be planted during the coming week.

The condition of grass on the range is the best that it has been for years.

Colby.

The weather this week has been very variable. It rained nearly all day Sunday, then turned off cool and windy Monday, hot and sultry Tue. and Wed., and ended rainy cool and windy. For the first time this spring extensive areas of soil are blowing quite considerably north-east of town this afternoon. Most of the fruit trees except apple are in bloom now. All grains have grown considerably the past week, the rye being 6"-8" high, winter wheat 4"-6", oats, spring wheat, and barley 2"-4".

The ground has been prepared for corn, milo and kafir. Corn planting will begin as soon as possible this coming week. The weeds promise to give more trouble than usual this year. The plats have been lined and trimmed.

Max. temp. for week 84; minimum 42. Average hourly wind velocity 7.3 miles, precipitation .93", evaporation .791".

Dalhart.

The weather during the past week has been very favorable for farm work. All of the spring plowing on the rotations has been finished and practically all of the crop work. All of the small grains are looking well and as yet have not suffered any damages from blowing.

Maximum temperature for the week 84; minimum 41. Total precipitation for the week .28", for the month of April 5.15".

Dickinson.

The past week has averaged cooler than the preceeding one but has had no freezing temperatures. The maximum temperature was 78 and the minimum 34.

There was only a trace of precipitation recorded for the week. The total for the month of April was .73". The normal for April based on twenty-three years of records is 1.18".

High winds have prevailed during the latter part of the week. However, due to the low average temperatures and high humidity the evaporation has not been greatly increased. Cropping conditions around Dickinson are no doubt in a rather critical condition. Last week's precipitation gave sufficient moisture to the soil to start germination nicely but the surface six or eight inches has dried out very materially this week and unless more rains fall during the coming week there is likely to be much crop suffering in this vicinity.

In taking coming-up notes it is noticed that wheat on fall plowed corn is showing a very poor and uneven stand. Oats and barley are coming thru on spring plowed stubble (grain) plats.

Sweet clover in Rot. 32 is practically 100% winter-killed. That in Rot. 31 come thru with practically a 75% stand. The difference in winter resistance is perhaps due to the different conditions under which each plat was brot to the winter season. In Rot. 31 the sweet clover was protected by a rather long wheat stubble and after harvest there was very little volunteer grain or weed growth. In Rot. 32 the sweet clover was on the oats plat. This plat due to damage by hail at nearly ripening time had to be harvested by means of a mower. Consequently there was

Dickinson, continued.

a very little stubble to protect the clover during the winter. There was also a heavy volunteer growth of oats after harvest. Perhaps the sweet clover plants were obliged to suffer for want of sufficient moisture to make a more or less vigorous growth during the remainder of the season and went into winter conditions materially weakened. Sweet clover on other parts of the farm suffered in a similar manner.

Up to date six-foot soil samples have been taken on all wheat, oats, barley and corn plats of the Dry Land Project.

Edgeley.

The past week has been quite favorable for farming operations and for the crops already seeded. There was a light rain Monday but the rest of the week has been quite clear and cool. The rain of Monday together with that of last week moistened the soil to a depth of nearly a foot, that is with what moisture was already in the soil.

On the fall and spring plowed land the grains have come up very uneven. The stand appears to be very thin and in spots it has not come up at all. Upon examination a considerable portion of the seed seems to have only just germinated since the rains. On the fallow and corn land the stand is good and quite even.

The alfalfa and clover in Rotations 42 and 11 were seeded Tuesday while the surface was moist from the preceding days rain.

Maximum temperature 77; minimum 30. Precipitation .36 inch.

Garden City.

The past week has been ideal growing weather; being sultry considerable of the time, and the nights warm. On the 25th there occurred 1.12 inches of rain, followed by scattered showers during the week, bringing the total up to 1.42 inches.

Small grains are making a rapid vigorous growth. Soil sampling done on M. C. wheat on the 27th showed approximately 20 per cent of moisture in the first foot with half of the second foot well filled.

The rain on the 25th failed to moisten the soil but slightly deeper than it was before. The maximum carrying capacity determined on irrigated soil ranges from 20 to 30 per cent with different depths. The 5th foot seems to have the greatest water holding capacity.

Potatoes planted on April 2nd in lister furrows are just coming up. One plat of potatoes planted in furrows made by corn planter disc furrow openers began coming up several days earlier than the above.

The pumping plant on the station is now being overhauled, and put in shape for the season's work.

Max. temp. for week 83; minimum 40. Ave. wind velocity 2 ft. anemometer 9.1 miles, 8' anemometer 12.1 miles. Evaporation 1.450".

Hays.

Weather during the week has been warm, cloudy and rainy. Total precipitation for the week 2.57 inches.

Maximum temperature 90; minimum 42.

Small grain crops all making fine growth. A heavy dashing shower, .70" yesterday, April 30, was too severe on the young alfalfa seeded April 17th. A good stand had been secured, but today it looks very much as if it will be necessary to re-seed on account of damage done by the rain.

Rains during the week prevented as much field work being done as was planned for. However, the listed ground on fallowed blocks including Rots. 501 to 10 and 551 to 60 was leveled by cultivating. A few other odd plats were cultivated to destroy weeds. The trimming of plats was completed, and most of the five link alleys were cultivated. Quite a number of stakes were labeled for permanent stakes. We now have enough labeled stakes,-one for each of the 208 plats on the project.

Soil moisture determinations were made on the plats growing peas and rye for green manure. Also soil samples were taken on pea and rye plats for nitrogen determinations.

Hettinger.

This station is now under quarantine for small pox. It will be at least three weeks before we will be allowed to roam at large.

Seeding of everything but flax, corn and alfalfa has been completed and plowing for corn has been begun. The soil is in fine condition since last week's rain. A Northeast rain is now in progress too.

2000 ash trees and some hedges are being planted and large trees are being transplanted along the main drive.

April closed with 1.56" rain to its credit and some of the windiest and driest days to its discredit. Last frost came on the 12th.

Max. temp. for week 78; minimum 33. Precipitation .01".

Huntley. Report for week ending April 24.

The first part of the week was very warm for this part of the year. The last three days have been cool and rather cloudy with no precipitation.

An excellent stand of spring wheat has been obtained, except on plats that were spring plowed. Oats and barley seeded a week ago are coming through the grouud on fallow and fall plowing.

The season here is unusually dry. Winter rye is showing signs of needing moisture.

Max. temp. 81 on the 20th; minimum 23 on the 22nd. No precipitation.

Huntley. Report for week ending May 1.

The first days of the week were warm and windy. Rapid growth has resulted on spring seeded plats, where there was sufficient moisture. Germination has been uneven on many plats, however. Winter wheat on fallow has suffered little to date. As in previous years, the stand after green manures is the thinnest in the field. All plats of continuous cropping and after corn have suffered, and have made but little growth. Winter rye has

Huntley. Report for week ending May 1, continued.

suffered perhaps more than winter wheat; it is in the boot, and is only about 8 inches high.

Flax was seeded April 30.

Beginning April 30 and continuing today (May 1) a slow, cold rain has been falling, accompanied by wind. Should this continue long enough it will be of great value to the locality.

Some grain on the project has been"irrigated up". Beets that were in the ground have not started.

April has been outstandingly warm and dry, as shown by the following monthly averages:

	1911	1912	1913	1914	1915
Precipitation.....	.85	2.00	.43	1.16	.21
Mean Maximum.....	55	60	60	60	65
Mean Minimum.....	28	33	32	33	38
Mean Mean.....	42	47	46	45	51
Evaporation				2.770	4.145

Maximum temperature for the week 86; minimum 38. Precipitation .13".

Mandan.

Drying winds have continued during most of the week. Land has been prepared for the forage crop and flax plantings. About 2000 of Hansen's dry land alfalfa plants were transplanted into rows for seed production.

In the fruit breeding tract, from 2000 to 8000 of each of the following plants were planted for selection purposes: grapes, juneberries, plums, bulberries, and a dry-land peach from China, Amygdalus davidiana.

About ten acres of box elder and ash seed were planted in 30" rows.

Maximum temp. 79; minimum 32. Precipitation .15".

North Platte.

Wind and sunshine the first three days of the week dried the fields so that field work was begun Wednesday noon. No team work had been done for six and one-half days previous to this time. Showers occurred Thursday, Friday and Saturday, so that the week closes with but one and one-half days of field work accomplished. Brome grass and alfalfa were seeded in Rotations 41 and 42 between showers Friday. Barley and emmer fields are not yet seeded.

Soil moisture has penetrated to 30 inches or more in all plats sampled. The sampling tube can be pushed to the two foot mark without the use of the hammer. Plats summer tilled in 1914 contain four to six feet of moisture. In a ten acre field of winter wheat on the bench land, summer tilled in 1914, no dry soil was reached with the ten foot tube.

Precipitation for the week 1.61 inches. For April 6.77 inches. This breaks the April record for precipitation for the 40 years during which records have been kept.

Ave. max. for week 70; ave. minimum for week 47.

Scottsbluff.

The weather for the week has been rather unfavorable for field work. A .77 inch rain fell on the 25th. On the 28th, a stiff wind started up, accompanied by rain and this combination continued the remainder of the week. This makes 1.98 inch precipitation for the past seven days and brings the total for April up to 3.98 inches, 1.64 above the four year average. The precipitation has been of such a nature that the soil has absorbed it all as fast as it fell. Recent soil sampling shows the first two feet to be well filled and an increase in the third foot.

Plowing for corn was commenced during the week, but was interrupted by rain. Oats and barley seeded on the 19th were up on the 29th. Peas also made their appearance.

Tucumcari.

Max. temp. for week 86 on the 29th; minimum 42 on the 26th.
Precipitation for the week .04 of one inch.
Evaporation for the week 1.892".
Average hourly wind velocity 6.6 miles.

The total precipitation for April is 4.57 inches. This is the highest precipitation for any April since weather readings have been taken at Tucumcari. The nearest approach to this amount was the 4.51 inches recorded for April 1913.

For the past three days we have been having high-dry Southeast winds which have averaged over 20 miles per hour for several hours each day- as recorded on our two foot anemometer. Most of the Dry Land and the Variety plats were disked the latter part of the proceeding week and the first part of this week so there have only been a few plats on which much blowing has taken place. These plats are being taken care of today.

Six varieties of potatoes, received from the Office of Horticultural and Pomological Investigations, were planted during the past week. Two rows of each variety were planted. One row of each variety will be mulched to a depth of from four to six inches with straw and the others will be given the usual treatment.

Some years, in Eastern New Mexico, good potatoes have been raised, but in the majority of years they are a failure. There are many differing opinions for these failures but nearly everyone agrees that the ground becomes too hard, too hot and too dry. By mulching with straw we hope to control these factors and find out whether or not there are other factors which are unfavorable to the growth of potatoes.

The principle work for the week has consisted of fence building and disking of plats.

Williston.

All the dry land wheat plats emerged on April 29th, the oats on April 30th, all showing even stands. The flax was seeded today, this finishes all the seeding on the plats with the exception of corn which will be put in next week, weather conditions permitting.

The weather has been cool and windy, particularly the latter part of the week. There was no precipitation, altho the sky was cloudy and the air very damp and cool for the three days preceding May 1. Minimum temperature 33, maximum 79.

Woodward. Report for week ending April 24.

The past week has been mostly devoted to improvement work on the station roads and to plowing under of rye in which the orchard trees were planted. It has been a great struggle to overcome blowing and weeds, and rye planted to protect from blowing, due to the continued rains. During the past week there have been four rainy days with a total precipitation of 1.19 inches. It was hoped that the corn would be planted this week but some of the plats have been too wet. This is, however, most excellent weather for the trees which have been planted and most of them are starting to leaf out and will probably continue in favorable condition throughout the season, due to the great depth the moisture has penetrated into the soil. Over the country generally roads and railroads have washed out, causing an immense amount of damage. Wheat is very heavily stooled and will probably make an excessive growth of straw. Oats and barley are in fine condition and farmers are putting in every day possible in preparing their fields for corn and sorghum.

A visit was made on Friday to a section about twenty miles east of here. Considerable pride seems to be taken in that section, located south of Quinlan, in the upkeep and ornamentation of the farm homes, and there are a number of rather extensive orchards. One orchard of Elberta peaches, now in its second year, is 110 acres in extent.

Woodward. Report for Week ending May 1.

This week we have had only 1.23 inches of rain, coming as last week on four different dates; therefore it has been somewhat of a problem eliminating the weeds and getting the station in a clean and finished appearance. Over the country it is reported that some of the wheat is already heading out, though on the station no indications of heading appear, the wheat on the fallow plat being about a foot high at present. The winter wheat series show that A is much behind B and with a thinner stand due to thinner stooling, and that D has a very heavy stand and very rank growth. The rye is at present heading. Some of the early rye headed a week ago and can be cut in a few days. The first cutting of alfalfa will probably be made in less than two weeks. Many people from Woodward are fitting out wagons and preparing to follow the harvest into Kansas.

The principal work done on the station this week has been fencing, planting of the corn plats, plowing under of weeds and rye, and road work. The spring generally has been cool and there has been a lack of very high, destructive winds. The precipitation up to date is 12.14" since the 1st of January.

C. A. BURMEISTER.

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SEASON OF 1915. MAY 8 1915.

Reports for week ending May 8, 1915.

Akron.

The past week has been cold and wet and little field work was done. Small grain is growing very slowly. Plums, currants and gooseberries are in blossom and the prospects are good for a crop of fruit from these. Grass is starting well on the range and stock is beginning to put on a little flesh. However, stock has wintered unusually well in this section.

The Station was visited on Tuesday by Mr. Ellison, former Superintendent of the Nephi Station who was en route to Washington.

Maximum temperature for the week 65; minimum 28. Precipitation .56".

Amarillo.

Except for the last two days, the week has been cloudy and cold, the thermometer dropping to 29 on the morning of the 7th. No serious damage to fruit trees resulted from this around here as the blooming stage was pretty well past. There was no damage done to field crops.

Filed work on the station is resumed after a month's lay-off due to wet weather. Plantingof forage crop varieties, trimming plats, exterminating weeds and preparing ground for corn and sorghum crop planting next week have been in order. Among forage crops on the station the Winter Gray peas are making a fine showing, this being the 2d season these have come thru the winter in good shape. In many places over the plats as well as on the prairies generally, a heavy growth of wild barly grass has come on and threatens to crowd out the Buffalo and Grama grass. Whether or not this will prove to be anything serious remains to be seen.

Reports are that 1st. cutting of alfalfa has been started in this locality. This is 10 days earlier than usual.

Since the rains have let up regular soil sampling work has been resumed and determinations on depth of penetration and carrying capacity will be made.

Max. temp. 72 on the 1st; minimum 29 morning of the 7th; average mean temperature 53. Precipitation .08 inch. Evaporation 1.396 inch.

Average hourly wind velocity 9.1 miles.

Archer.

The past week has been very favorable for field work, excepting on the 6th when about two inches of snow fell. All of the cereal varieties of wheat, oats, barley and peas have been seeded. All of the D. L. A. spring plowed plats are now ready for seeding, the corn plats having been plowed, disked and harrowed this week.

The thermometer went down to 23 on the 6th and has been to 32 or below on 6 of the past 7 mornings. Some varieties of small grains that were just emerging, were injured by the frost, but those that were a few days further along, apparently were not hurt. Alfalfa was injured by the frost, and some of the leaves have shriveled and turned yellow as a result. Cool cloudy weather has prevailed and but little growth has been made by any crops.

Several water pipes which froze and burst during the winter have been replaced by larger pipes, set deeper in the ground.

Archer, Continued.

The irrigated experiment station at Cheyenne, of the Office of Experiment Stations, is to be discontinued, as a result of the re-organization of the Department of Agriculture, and it is causing some concern at Cheyenne.

Farm work in this section is slightly behind that of previous years, and many of the farmers are figuring on seeding small grains after the 10th of this month, thinking that larger yields will be had by this practice. In some cases in the past, that has been a fact.

Max. temp. for week 68; minimum 23. Precipitation.25", with 2 inches of snow.

Ardmore.

Maximum temperature for the week 66; minimum 29. Total precipitation .90 inch. Frequent light showers during the early part of the week made it impossible to do any work in the field until the 7th, with the exception of breaking several acres of sod. A killing frost occurred on the night of the 12th, but very little damage was done to crops.

The surface of the ground has dried out rapidly during the last three days, and we expect to plant the rotation plats of corn Monday the 10th. The sub-soil is full of water. In taking soil samples were are not excited over all of these favorable indications, but they do look good when compared with the last three seasons.

Bellefourche.

The rains of last week left the soil too wet for field work to be done until the 7th. On the 7th and 8th the wheat, oats, and flax plats for moisture reduction work were seeded, and the potato plats plowed and disked.

Owing to the cold weather crops have been practically at a standstill for the past week.

Several hundred ornamental shrubs and trees were planted on the station grounds.

Two frosts, one of them quite heavy occurred during the latter part of the week but none of the crops were injured.

Maximum temperature for week 79; minimum 28. Precipitation .16 inch.

Dalhart.

All of the spring plowing has been finished but no planting has been done. All of the grain crops as well as the alfalfa is making a splendid growth. The grass on the range is green and there is an abundance of it.

Considerable snow, accompanied by a high wind, fell Thursday the total precipitation being .38 inch mostly snow. This snow was followed by a temperature of 29 degrees Thursday, but very little damage was done by freezing.

Maximum temp. for week 75; minimum 29. Precipitation .38 inch.

Big Spring.

Most of the week has been fine for field work with the exception of Monday morning. We are taking advantage of the good weather and have been busy cultivating the plats and crop land and getting it in shape for planting.

Thursday afternoon, Friday and Saturday were devoted to planting cotton, milo and cowpeas and corn in the C. C. and rotation plats. Some seven or eight acres have been planted to feed crops. We find the moisture conditions ideal for planting and we are in hopes that the good weather will continue for at least ten days. Precipitation for the week about .25 of an inch. Friday and Saturday was quite cool but not cold enough for frost. The farmers throughout the country are busy planting and if the reports are true, the cotton acreage will be considerably reduced this season. Grass is fine on the range and in the pastures and all stock are looking well.

We have moved into the new station buildings and are glad to get settled again. We have numerous visitors out each week to see the station and the work we are carrying on.

Colby.

This has been a cold wet week. A gentle rain, falling all day Tuesday, put an end to field work until yesterday. Three mornings the minimum thermometer registered below freezing, but as the weather was cold and mostly cloudy the days following, very little damage was done. Monday there was considerable soil blowing northeast of town especially where the weeds had been burned off and nothing further done with the ground.

The corn was planted today. Plat D was gone over with a weeder to kill the weeds before planting. Ground squirels are plentiful. Poisoned corn had been scattered about for their benefit before planting time. Peas for green manure were sown Monday.

Maximum temp. 74; minimum 29. Average hourly wind velocity 8 miles. Precipitation .62 inch. Evaporation 1.34 inches.

Dickinson.

The weather for the past week has been exceptionally cold. The maximum temperature was 57 and the minimum 24. The average maximum temp. was 49; the average minimum slightly less than 33. During the night of the 7th-8th when the lowest minimum occurred, the temperature remained below 32 for seven hours continuously. Strange to relate very little damage was done by this frost. Practically the only noticeable effect was evidenced in case of barley and a very small percentage of tender tree buds which had just opened.

The total precipitation for the week was 1.07 inches. This fell principally in the form of snow. Perhaps this coupled with the extremely low temperature for this time of the year helped to increase the cold resistance of crops and vegetation in general.

Dickinson Continued.

Corn and flax were sown on the Dry Land plats during the last two days. This date for sowing flax is considerably earlier than those of previous years but from our experience with later sowing and following the suggestions set forth in a recent circular sent out by the North Dakota Experiment Station it seemed advisable to sow flax during the early part of May.

Edgeley.

Cold wet weather has prevailed throughout the week. Over two inches of rain fell last Sunday afternoon and it has been cold and windy with frequent sprinkles of rain almost every day since. Wednesday afternoon nearly an inch of snow fell. It was feared that the fruit prospects would be damaged by the cold, but as the temperature only went to about three degrees below freezing no damage was done, apparently.

Very little field work has been done except for some plowing. Moisture samples were taken yesterday, and where shale did not interfere the soil was found to be fairly moist to a depth of five feet. The lower two feet, however, contained some moisture before the rains. At present the upper foot is quite soft to work well.

Very little growth has taken place during the week. On the fall and spring plowed plats, however, where the stand was poor, more of the grain is coming up so that there will probably be a fair stand.

Maximum temp. 61; minimum 29. Precipitation 2.35". Weather Bureau measurement 2.72".

Hays.

The weather during the week has been varied and quite cool. Maximum 77; minimum 34. Good rains the first and middle of the week, (total 1.50 inches) has kept the soil in too wet a condition for field work most the time. We have thus far escaped frost, and since it appears to be warming up again, we are in hopes we will have no more frost this spring.

Corn was planted May 4th. Soil moisture determinations were made on M. C. W. Wheat plats A to F inclusive, and on one plat of alfalfa.

Roads have been pretty well cleared of wheat and weeds of which the former was sown in the fall to prevent blowing during the winter and the latter (weeds), insists in growing in the roads the same as everywhere else.

The placing of labeled stakes to all the plats is being completed today, except the plats which are yet to be seeded to sorghums.

Hettinger.

Flax plat on Rot. #12 is being seeded and corn plowing will be begun. Wheat has been up several days. The warm weather we are now having is making growth quite rapid. Oats is just peeping through. Former planting of Swedish Select Oats and Hulless Barley has been changed to Silvermine and Hannchen. Northwestern Dent will be planted instead of Golden Dent.

Hettinger continued.

Rain for May has now totaled 1.50" .10" of this was in the form of a heavy flurry of snow. The temperature fell to 22 on the 7th. Grass was hurt a little.

The quarantine still continues with considerable inconvenience to the carrying on the work of the station.

Maximum temperature for week 78; minimum 22. Precipitation 1.50".

Huntley.

The past week has been cool with considerable precipitation and cloudy weather. The much needed precipitation came in time to prevent much damage with the exception of winter rye and winter wheat on continuous cropping. The rye is heading and is less than a foot in height.

During the week stakes have been stamped for the plats. Plowing for the corn is being done.

Maximum temperature 63; minimum 28.

Precipitation 1.15" recorded on four different days.

Mandan.

During the week planting has been continued. Evergreens to the number of about four thousand have been set out in the windbreak and about five hundred in ornamental plantings. Thirty varieties of potatoes were planted; also hill selections of each. Some Russian golden willows and caraganas were added to the windbreak planting.

About ten thousand willows and poplars were set out in a good piece of heavy soil for the production of cuttings to be used in shelterbelt development work.

The ground adjacent to the station buildings has been broken preparatory to seeding to grass for lawn.

The cool, cloudy and somewhat rainy weather of this week has been excellent for the rather extensive tree planting, etc., which has been done.

The growth of the small grains has been retarded by reason of the weather.

Practically all of Mr. Dillman's alfalfa and brome grass was planted this week. Mr. Charles H. Clark's flax selections have been received and will be put in next week if the weather permits.

Bids were opened Friday for furnishing water main to connect with the city supply.

Maximum temperature 55; minimum 29. No damage by frost was noticed. On the fifth snow began falling in the morning but it stopped about 10-A.M. About 3/4 of an inch - very wet - melted during the early afternoon. Total precipitation .66 inch.

North Platte.

The first four days of the week were cool, frost occurring on two nights. The week has been the most favorable for field work since the season opened. Only one half day was lost on account of rain.

Seeding of small grain has been completed and potatoes planted in the rotation plats. Ground is being prepared for corn and planting will be begun the first of next week.

Pastures are in excellent condition and alfalfa is about knee high. Rye is in the boot.

Mean temp. for week 54; maximum 74; minimum 31. Precipitation .22".

W. W. Burr arrived on the station today, May 8th.

Scottsbluff.

The remarkable features of the first eight days of May were the continued freezing temperature and the high wind that prevailed. The wind blew steadily up to the 4th, the two foot anemometer registering a velocity at times, of 24 miles an hour. A summary of the thermograph readings follows:

Date	1	2	3	4	5	6	7	8
Maximum	52	50	55	51	55	59	50	65
Minimum	44	31	34	26	34	26	28	34

No plant growth took place. Alfalfa was rather badly frosted and sugar beets that were thru the ground were frozen. Precipitation .08".

Plowing for corn, sorghum and flax was finished and those crops planted. Plats E and F of the winter wheat series were seeded to spring wheat. The soil was so dry last fall, that winter wheat on these plats failed to germinate. This completes all seeding for this season.

Tucumcari.

Maximum temp. for week 73 on the 4th and 6th.

Minimum temp. for week 30 on the 7th.

Average hourly wind velocity 7.9 miles per hour.

Evaporation 1.915 inches. Precipitation .03 inch.

On May 6th we had a light snow. The same night (6th.-7th) the temperature dropped to 30 degrees with the result that quite a number of trees and shrubs about the grounds were frosted. Some people have reported that beans and other tender vegetables they had planted in gardens were killed.

The work of the week consisted mainly of disking our lower field, fencing building and some planting.

One plat of Dwarf milo, date of planting work, was planted on the 7th. All of our cotton on the dry land plats is being planted today.

The surface of the ground has been dried out to a depth of from 3 to 5 inches by the dry winds of the past week and in order to place our seeds in moist dirt we are using disc furrow opening attachments on our two row planter. These discs crowd away the dry dirt and allow us to plant the seeds in the moist dirt below, without the necessity of covering them too deeply.

Tucumcari continued.

Professor Conway, State Leader for Boys and Girls Agricultural Clubs, visited the station on the 7th.

The steer feeding test which we have been carrying on this spring in cooperation with the N. M. State College will be concluded today as the feeds used in one of the rations have nearly run out. This test has been conducted for about 80 days.

Williston.

Weather conditions remain unchanged. While practically the entire state has had good rains during the past week, this locality has had nothing but threatening and disagreeable weather. In the territory immediately east of here about eight inches of snow fell the early part of the week. Temperature has been generally cool, minimum of 17 degrees occurred on the 8th inst., doing no damage to the grains and alfalfa, but affecting tree leaves and some of the fruit blossoms. A minimum temperature of 31 degrees on the 5th did practically no damage. The maximum temperature was 68 degrees on the 9th instant.

While it is somewhat dry, none of the crops are suffering, and are making a good root growth due to the cool weather. The corn in all the dry land plats was planted on the 8th, using a strain from the ear row tests.

From moisture samples taken early in the week the soil is still in fair condition in the root feeding zone.

Nearly all spring work in the neighborhood has been finished with the exception of corn planting and the seeding of alfalfa. These are now being pushed vigorously, and a large acreage will be put in.

Woodward.

Though there has been but 1.36 inches of rainfall this week, it has been distributed over five days and, therefore, the accomplishment of much field work has been impossible. The weather has been distinctly cooler than it should be for this time of year. There has, however, been during the drier intervals a great deal of kafir and milo planted over the country, which is rather an unusual thing at this date. With the excessive moisture that has fallen and the early planting of the rowed crops it is probable it the heavy wheat harvest expected sones on that most of the sorghums will be very badly neglected as they were last year. The raising of winter wheat and the rowed sorghum crops is a very bad arrangement; in fact many farmers who have a large acreage of wheat are neglecting to plant a large acreage of row crops because of the impossibility of attending to them. They expect, however, before or directly after harvest, if conditions are favorable, to jump in and put out late feed crops. On the Station, weeds on the general fields have not yet attained any advantage over us and probably will not, but the appearance of the Station roads, etc., is distinctly ragged. It is hoped, however, that this constant rainfall will cease so that we can have a clean-up day.

Woodward Continued.

The four Spring months to the 1st of May recorded 11.91 inches of rain. This is making the wettest four Spring months in twenty years' rainfall record. April, with 6.53 inches, is the wettest April ever recorded. The total rainfall since January 1st is 13.27 inches.

C. A. BURMEISTER

W E E K L Y B U L L E T I N

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE.

SEASON OF 1915. MAY 15 1915.

Reports for week ending May 15, 1915.

Akron.

The corn on the rotations was planted and some work done on the roads during the week.

Mr. J. S. Cole visited the station Tuesday.

Max. temp. for week 88; minimum 44. Precipitation trace.

Archer.

The first five days of the week were cloudy and cool and threatened rain, although but a trace fell. The past two days have been clear and were the warmest that have occurred yet this season, and winter wheat and rye have responded very noticeably. Winter rye has grown several inches during the past week and now stands from 8 to 10 inches high, while winter wheat is jointing and stands about 6 inches high.

Winter wheat stands, excepting on plat M.C.D are very uneven, due to the dry condition of the soil last fall and the consequent poor germination. However, with the abundant supply of moisture in the soil at the present time there is prospect of a profitable crop.

Alfalfa and brome grass were seeded on the 14th.

Oats and wheat seeded on the 28 and 29th ult., came up on the 14th while barley seeded on the 3rd emerged on the same day. This is in part due to cool weather, after seeding the wheat and oats.

About 3000 cottonwood, poplar pine, and arbor vitae trees have been planted as wind breaks during the past week. Trees planted last season are just coming into leaf. Balm of Giliad trees planted last season are nearly all dead this spring and were replaced.

About 25 acres of land for silage corn, was plowed during the past three days, with a gasoline tractor. The ground was slightly wet for best tractor plowing, and baking resulted from the packing of the engine.

Flax and corn will be planted during the coming week. In the treatment of flax for smut, I tried a method which was new to me, and which I had never seen used. The flax was spread thin on a canvas, and the formalin solution sprayed on with a hand spray, while the flax was being turned and stirred. Thus all of the flax came in contact with the solution and lumpiness which is so common when sprinkled by hand was avoided.

Max. temp. for week 83; minimum 34; mean 57. Precipitation trace.

Colby.

Excellent growing weather has prevailed for several days. This has been the hottest week of the year thus far. A hot South wind blew Thurs. and Fri., browning the tips of the leaves of the spring grains, more particularly of the oats. Shade trees are now in full leaf. Corn and peas, planted last week, are coming up today. Milo and kafir on the D.L.A. plats were planted yesterday. The ground is still fairly moist.

Supt. Clark has been at St. Louis since Wednesday.

Max. temp. 92; minimum 41. Average hourly wind velocity 7.3 miles.

Evaporation 1.89". Precipitation none.

Dalhart.

The weather during the past week has been very hot and windy. All of the plowing has been finished and a part of the land in condition for planting. Some alfalfa, milo and soy beans have been planted. Owing to the rather cold nights the soil is as yet cold for germination. The strong winds of the past few days have dried out the top 4 inches of soil and unless some rain falls within the next few days crops will have to be planted deeper than usual.

Maximum temperature for the week 91; minimum 40. Precip. none.

Dickinson.

Excellent growing weather has prevailed during the entire week with two fair rains totaling .75 inch. The maximum temperature for the week was 79; minimum 37. The winter rye is in very good condition,- having come thru the winter with a perfect stand and now is commencing to tiller. Peas sown for green manure came up during the week and are making good growth.

Mr. Manley Champlin of the South Dakota Experiment Station visited this station of the 14th.

Edgeley.

Fair weather prevailed thruout the first two-thirds of the week. There was a light shower Friday morning while last evening there was a heavy shower and it is still raining some. All of the grains, the alfalfa, and the brome grass have been growing well. While there is a good stand of red clover it does not seem to be making much growth. Weeds are coming up thickly in all the grain.

The stand of grain on the spring and fall plowed land presents a much more even appearance than it did a week ago. Apparently the grain which came up late will not be far behind the earlier this year.

Plowing for corn was begun the first part of the week and all the plats in the rotations have been finished. Some corn was seeded on the station Thursday but the soil was too wet yesterday for that work and it is hard to tell now when it will be in fit condition.

Max. temp. 86; minimum 33. Precipitation 1.23 inches.

Hays.

During the week it has been generally windy and warm. Maximum temperature 93; minimum 49. No rain except traces.

All small grains making good growth and looking fine. Corn is up nicely.

Sorghums, including 34 plats of kafir, 7 plats of milo and 1 plat of cane were planted yesterday, (Saturday).

Soil moisture determinations were made on 32 plats the first of the week.

Corn was harrowed.

Mr. W. W. Burr arrived yesterday, May 14, and leaves tonight for Colby.

Ardmore.

Maximum temp. for the week 88; minimum 41. Total Precipitation .07 inch.

The week has been uniformly warm and favorable for plant growth and field operations. All corn plats and fields of the same crop were planted during the week. The flax rotations were seeded. A field containing about 15 acres was planted to sorghum. An additional 40 acres will be planted to this crop during the coming week. All small grain plats have been trimmed, and the roads on all parts of the farm have been graded.

The superintendent of the station made an automobile trip of 175 miles on May 20th. He drove due west from Ardmore a distance of 75 miles and returned home by a circuitous route. No occupied houses were passed after reaching a distance of 20 miles west of Ardmore. The Wyoming line was passed at a distance of 24 miles west of Ardmore. Most of the country is still open to homestead and is used as open range. Only one small herd of cattle were seen, but there were several bunches of good horses. The grass is in splendid condition on the range, and it appears that there is sufficient range for more cattle or horses.

On the trip two herds of antelopes and one large grey wolf were seen.

Mr. Roy A. Ward of the Bureau of Biological Survey is spending several months in the vicinity of Ardmore in the interest of exterminating prairie dogs on government land. While in the vicinity he is making his headquarters on the station. While in the field he is assisted with a crew of several men.

Bellefourche.

The week was very favorable for field work. Potatoes were planted on the tenth in the rotations and on the eleventh in the moisture reduction series. Plowing for corn was started on the eleventh. All of the plowing, discing, and harrowing preparatory to seeding was completed and the corn planted. Corn and beets were also planted in the moisture reduction series and soil samples taken on all of the plats in that series.

The oats, barley, peas, and flax emerged during the week.

Winter rye has commenced to "shoot".

Maximum temperature for week 82; minimum 38. Precipitation none.

Huntley.

The weather for the week has been quite variable but favorable for plant growth. The wind velocity has varied from 1.1 miles per hour on the 12th to almost 10 on the 15th. While the temperature has remained almost normal there have been cloudy periods nearly every day. Precipitation, the result of thunder showers, has been

Huntley, continued.

recorded on 3 days. Hail has fallen on two days, though not heavy enough to cause serious damage.

Plowing for corn and for ordinary methods of fallow was completed during the week. Corn was planted on the rotations on the 12th and in Field G, for pasture tests, on the 14th. Flax is up nicely.

The edges of some of the plats of spring seeded small grains were eaten down by the army cut worm. With the recent favorable weather, accompanied by rapid growth, the effect is not now noticeable.

Maximum temperature 81; minimum 41.

Precipitation .37 inch. Evaporation .730".

Mandan.

A rain of 2.02 inches the night of the 14th came at a most opportune time as the previous rains did not penetrate more than about ten inches. This rain will prove invaluable, securing a good stand of the various horticultural plantings that have been made during the past three weeks. The plantings during the week included a large number of ornamental trees and hedges that were set out on the grounds.

About five thousand rooted cuttings were planted in a permanent cutting block. Thirty sample hedges of various species of shrubs and trees, the hedges averaging 40' in length, were planted in order to determine species that are best adapted to this purpose.

The alfalfa nursery plantings were made the forepart of the week.

Mr. Manley Champlin, of the South Dakota Experiment Station visited the station on the eleventh.

Maximum temperature 83; minimum 36. Precipitation 2.26".

Scottsbluff.

The week was characterized by conditions favorable to plant growth, warm weather prevailing most of the time. Rain fell in the country all around us, but only a trace was recorded at the station yesterday. Lightning is striking with increasing frequency in the valley. During the storm yesterday another man was instantly killed.

A weeder was run over all the plats to break up the crust that had formed and to catch weeds that were getting a start. The plats have been edged up and roads and alleys cleaned of all weeds. Flax, alfalfa and sugar beets emerged during the week.

Mr. A. A. Potter who has been here the past week starting his experiments in head smut of corn, leaves today for Amarillo, Texas.

Garden City.

The greater part of the past week has been spent in preparing the seed bed for the corn and sorghum plats. These plats have all been staked and planting will be started Monday morning.

Most of the summer tilled plats were cultivated to destroy weeds.

Small grains, with the exception of oats and rye are still growing nicely. The two latter crops are beginning to fire some.

Dr. Miller of the Kansas Agricultural College arrived at the station on May 5th. to continue his physiological investigations regarding the drouth resistant qualities of the sorghum crops.

Max. temperature 94; minimum 46.

Tucumcari.

Average hourly wind velocity 6.3 miles.

Max. temp. 93; minimum 41. Precipitation none.

Evaporation 2.429 inches.

The past week has been one of unusually high temperatures for this time of the year. Although the ground is well filled with moisture below the surface few inches, the surface is drying out rapidly and unless we have some rain in the near future some difficulty may be had in getting the crops to come up.

The cotton and milo planted last week are beginning to come through the ground.

The principle work of the week consisted of planting. It is hoped that this will be completed about the middle of the coming week.

All of the small grains on the station are making good growth. During the past week, however, the hot winds have so dried out the surface soil that the wheat and oats are firing a little.

Woodward.

The past week has been a great work week for every farmer in the section. No rain has fallen for the first week in many,and except for rather too high wind generally the weather has been fine for field work. Much corn is up high enough to cultivate and most of the sorghum crops are either in or are being put in as rapidly as possible.

On the station the week has been devoted to plowing and otherwise preparing the land for the sorghum crops. All the sorghums on the Dry Land Rotations were seeded the 15 & 16. Because of the very wet spring the rye planted on vacant and sandy spots over the station has yielded a very abundant hay crop.

C. A. BULLETIN.

W E E K L Y B U L L E T I N

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE.

SEASON OF 1915. MAY 22 1915.

Reports for week ending May 22, 1915.

Akron.

The corn varieties were planted Monday. Monday was very windy, Tuesday morning it began to rain and Wednesday morning it began snowing. Probably six inches of snow fell Wednesday and Wednesday night. A part of it melted as it fell but part did not disappear until Friday. No field work has been done since Monday. Practically all of the fruit was frozen, but the apple trees may send out a few new blossoms. Small grain was not injured seriously. Alfalfa was frosted badly and all the leaves of some of the forest trees were killed.

Maximum temperature 66; minimum 27. Precipitation 1.47 inches.

Mr. W. W. Burr visited the Station Thursday and Friday.

Amarillo. Report for week ending May 15, 1915.

Real West Texas weather of the warm, dry and windy sort has prevailed this week. Maximum temperature was 86 on the 12th and 13th. Minimum temperature 42 on the 9th. Average mean for week 65. Hourly wind velocity 9.3 miles. Precipitation none. Evaporation 1.761 inches.

Since rains have let up - field work has been rushing. Plat trimming and weed extermination work has been in order. Due to crusted conditions of surface soil as well as because of weed growth - the Hallock Weeder was run over the spring grain plats and all fallow, corn and sorghum plats were double disked. The 20 corn plats were planted today.

Winter rye is well headed and has commenced flowering. It is between 4 and 4½ feet in height. W. Wheat is 2 ft. high - all but A of the M. C. series which is not doing well. The spring grains are up between 6 and 8 inches. The wheat slightly and the oats very noticeably, were affected by the frost of a week ago. For several days the oats have looked flabby and of a sickly dark color - but are now recovering.

Moisture determinations indicate that the rains of April have penetrated into the 6th foot in plats B, C and D of the M. C. Spring Wheat Series. The B and C plats stored in this depth about 3.1 inches of water out of the 5 inches of precipitation in April, while the D plat which was fallow last year stored about 5½ inches of water - substantial gains being made in the 5th and 6th feet. In plat A - no gain appears to have been made below the 4th foot and very little above that. The surface of this plat remained wet after rains much longer than the rest - so that more of the water was evaporated from this plat - this condition inhibiting penetration no doubt also contributing to more run-off. The fine soil blown onto this plat and lodged in the stubble last winter - has a tendency to build up the plat and have surrounding ground lower - making for run-off. The shallower cultivated bed of this plat no doubt also had something to do with retarded penetration.

Lumber has been hauled and work commenced on a soil drying house 12 x 10 being put up here. The floor is to be of concrete onto which the sills of the building will be bolted. Material for the building cost about $50.00.

Bellefourche.

The week as a whole was cold and crops made practically no growth. Two fairly heavy frosts occurred but did practically no damage.

The roads were graded and the plats trimmed during the week.

The fourth unit of the irrigation project will be open for settlement on June 8, and from present indications there will be a large number of filings made at that time.

There was little rain but the cool damp weather kept the surface of the soil so moist that field work could be done on only three days.

Maximum temperature 65; minimum 30. Precipitation .31 inch.

Big Spring. Report for week ending May 15, 1915.

The week has been dry and warm and very favorable for farm operations. Practically all the C. C., rotation and variety plats have been planted. Also about 15 acres of the land devoted to feed crops was seeded during the week.

The cotton, milo, kafir, cowpeas planted the week previous is coming up to a good stand. The conditions are such, that we are counting on a good stand of all the crops planted, however, it will take a few days longer to settle this point.

Thousands of acres are being planted to peanuts in this section this season. A number of the farmers have decided it to be a good idea to practice a rotation of crops. Peanuts and feed crops or cotton and peanuts is the plan a number of them are working on this year.

The middle of the week, a trip was made with one of the large land owners over his farms and through his section of the country. It was noted that most of the farmers seen had planted their crops or were planting them at the time. While out several fields of winter wheat were visited and it was found that in most cases that the prospects for a good wheat crop is very good at the present time. One of the fields containing 500 acres was especially good and the wheat was out in full head and about 36 inches tall. The color of the wheat was good and on investigation sufficient moisture still remains in the soil to carry the crop a long for two weeks or more without it suffering for moisture.

The Lister-Planter is the universal tool that is being used most. In more than 150 miles covered during the week not one two row planter was seen in use. This season on the station we are using both and observations will be made on any difference noticed in the stands secured.

Colby.

Cold, cloudy, misty, snowy, rainy weather has prevailed all week. Freezing temperatures were registered on two mornings but no damage was done the first morning. The second morning the thermometer registered 30, but corn and some tender garden truck are the only things hurt seriously. The young Russian thistles were hurt some. After Monday no field work has been possible due to wet weather. The sun never shone from Tuesday until Friday morning. An inch and a half of snow fell Tuesday night and Wednesday forenoon. Last night, May 21, some rain fell and more is threatening tonight. The frequent showers this spring are interfering with sorghum threshing, much of last year's crop still remaining in stack.

Mr. Burr visited the station Monday and Tuesday.

Max. temp. 80; minimum 30. Wind velocity 8.1 miles.
Precipitation 1.73". Evaporation .99".

Mandan.

The weather has continued cold with occasional showers. A minimum of 26 degrees on the 18th did little damage, due probably to the cold weather of the past three weeks which hardened the vegetation. Seedling box elders which had made a growth of one inch and which we thought would be injured by freezing weather came through in good condition. In the forestry section, solid block plantings were made of a large number of species of deciduous and evergreen trees. Each block is 40' square and contains 100 trees.

On account of the cool weather, crops have been at a standstill for some time.

Some of the apple trees in the hillside orchard have been set out. There consist of hardy varieties on Pyrus baccata roots and should prove hardy, even in exposed situations.

The corn in the rotation plats is being planted. The balance of Mr. Clark's flax plantings were put in.

Mr. Smith, of the Forest Service, with headquarters at Denver, visited the station on the 20th.

Maximum temperature 59; minimum 26. Precipitation .38".

Archer.

The past week has seen but little field work done on this station. On the 16th the varieties of flax were all seeded, by working overtime, and about 8 P.M. rain began to fall. The rain soon turned to snow, and precipitation continued for 36 hours, at which time, at least 8 inches of snow had fallen, or .90 inches of precipitation. Cheyenne reports a 10 inch fall of snow; a condition which has not been duplicated in a corresponding period in 44 years. Snow layed on the ground until the 21st when it disappeared. The ground is thoroughly soaked and it will be several days before field work can be continued.

Archer, Continued.

Low temperatures accompanied the snow, but owing to the covering of snow, most of the crops were not hurt. Winter rye was not entirely covered and part of it was slightly damaged by frost. Trees, which were just leaving out were badly frozen. On the 18th and 19th the thermometer registered lower than a freezing temperature continuously. The lowest temperature reached was 22 on the 19th.

It had been planned to seed the D. L. A. flax and corn during the week, but weather conditions prevented, so, weather permitting, they will be planted the coming week.

Maximum temperature 79; minimum 22. Precipitation .90". Average hourly wind velocity 8.3 miles. Mean max. temp. 55; mean minimum 29; mean mean 42.

Garden City.

The past week has been a boon to small grains in this section, rain having come just in time to overcome serious injury from drought. A total of 2.38 inches of precipitation fell during the week and the amount lost by run-off was comparatively small.

The soil is still too wet for field work and the planting of the sorghum plats will have to be deferred until next week. The planting of the corn plats was completed on Monday the 17th. just before the rainy spell set in.

Max. temp. for week 82; minimum 33.

Avg. wind velocity 8' anemometer 13.5 miles; 2' An. 10.5 mi.

Rainfall as follows: .21" the 17th, 1.48" the 18th, .12" the 19th, and .57" on the 20th.

Hays.

With the exception of Friday and Saturday, it has been cloudy and more or less rainy every day during the past week, with accompanying low temperatures, but without freezing or frost. Total precipitation according to rain gauge on Dry Land Project is three and one half inches.

Crops looking fine, especially small grains, corn, alfalfa and peas. Sorghums which were just planted before the rainy period begun may not germinate well on account of the low temperature. However, the seed appears to be alright yet so there is still some hope.

On account of the wet weather there was but little field work done during the week.

North Platte. Report for week ending May 15.

Corn was planted on the rotation plats May 13 and 14. Soil is in good condition and germination should be rapid.

The week has been warm, dry and windy. The surface soil is getting quite dry.

W. W. Burr spent the first part of the week here.

Max. temp. 95; minimum 43; mean 67.

Amarillo. Report for week ending May 22, 1915.

Except for the past two days, rainy and cloudy weather has prevailed this week, commencing Sunday with a down pour of rain and hail which amounted to .74 inch. Rain during the four days following brought the total precipitation for the week up to 1.10 inches. Maximum temperature for the week was 83 on the 15th; minimum 36 on the 18th and 20th. Average mean temperature was 59. Average hourly wind velocity was 8.1 miles. Evaporation 1.538 inches.

Plat-end and alley-way trimming was completed. Planting of grain sorghums has been started and the kafir and milo plats on the Dry Land project were planted. Three plats have been added to the Dry Land Project - making a total of 130 tenth-acre plats at this station devoted to our work. The three new plats will be devoted to spacing experiments with kafir. Plat "A" having regular spaced rows 44" apart with plants 2 feet apart in the row. Plat "B" is double-spaced (rows 88" apart) with plants one foot apart in the row, hence same in number as on plat "A". Plat "C" also is in double-spaced rows but with plants 2 feet apart in the row, hence having half as many plants as grown on the other 2 plats. Soil sampling will be conducted on these plats to determine difference, if any, in moisture behavior under these three methods of planting.

Mr. B. B. Holland, who worked on the station 6 years ago, arrived Monday to assist in grain sorghum work this season. Mr. A. A. Potter was on the station from Tuesday to Friday looking after experiments relating to cereal crop diseases.

Ardmore.

Max. temp. for the week 69; minimum 28. Total precipitation for the week .98 inch. All of the precipitation was in the form of snow.

Snow began to fall on the 18th and fell continually for two days and nights. Most of it melted when it struck the warm ground, but there was four inches on the ground on the morning of the 20th. The wind blew hard during the entire storm, and the temperature got down to 28 on the 18th and 19th and was never higher than 34 on the same days. Crops were protected somewhat by the snow and very little damage was done. The storm was general in this section. At Crawford, Nebr., there was 12 inches of snow and at Alliance of the same State there was 18 inches. The last two days of the week were pleasant and warm.

Planting of forage crops will commence again Monday.

Dalhart.

With the exception of Saturday cold weather has prevailed throughout the entire week. For this reason no extensive planting has been done. Corn and Sudan grass is being planted today. Crops planted in the vicinity of the Station were in the ground from 10 to 12 days before coming up and a large part of these crops will undoubtedly have to be planted over if a stand is obtained. Winter rye is beginning to head out but is very short. The other small grains have not as yet begun to "shoot". Average Max. temp. for week 72. Maximum 82. Average minimum 42. Minimum 33. Precipitation .23 inch.

Big Spring. Report for week ending May 22, 1915.

The week has been dry, and considerable of the time, quite windy. On Thursday afternoon we had a sand storm from the west. No loss was occasioned on the station from soil-blowing but some of the neighboring farms were less lucky as some of their crops were blown out and will have to be replanted.

We have secured a good stand of all the crops planted, with the exception of peanuts and watermelons. These crops will have to be replanted to secure a stand. A considerable part of the week has been devoted to killing weeds in the plats and crop-land. The farm on which the station is located has been incultivation for 15 or 20 years and is pretty badly fouled with perrenial weeds, such as the "blue weed" and "mesquite weed", also the "horse nettle" is quite bad on some parts of the farm. It looks like it will take vigorous measures and frequent cultivation to keep them down and eradicate them. We have already been advised by a number of farmers that it will be impossible to kill them out, or get rid of them. We do not remember of having done on record to the effect that we will kill all of them out, but we hope to be able to thin them out a little. However, time will tell and we intend to amuse ourselves along that line this season.

Edgeley.

Field work on the D.L.A. plats was resumed on the morning of the 17th. All of the fall plowed and those of the spring plowed corn plats which had not been harrowed before were harrowed twice, while the spring plowed plats which had been harrowed once before were harrowed once. Planting of the corn was begun in the afternoon and finished the next day.

The flax plat in Rotation 12 was seeded the morning of the 17th.

The weather thruout the week has been much colder than usual for this time of the year. The temperature was below freezing two mornings and down to freezing one other morning, in all probability killing any chances for fruit here this year. Nothing else showed injurious effects of the frost to any marked degree although the alfalfa and brome grass showed a wilted appearance for a time after.

Maximum temperature 59; minimum 27. Mean temperature for week 43. Precipitation .35 inch.

North Platte. Report for week ending May 22.

The week has been characterized by wide extremes in weather conditions. Sunday and Monday were cool and dry with high winds. Sleet, snow and rain fell Tuesday and Wednesday. The snow was about 6 inches deep on the level Wednesday evening. Thursday remained cloudy and the snow melted slowly. A light freeze occurred Thursday night. But little damage to crops seems to have resulted from the storm. Rye in the head and winter wheat about knee high were badly lodged but have already partially recovered. Alfalfa fields which were about ready for the first cutting have the appearance of having been mowed. Field work was resumed again today. Corn on the station and in this part of the country is about one-half planted. Mean temp. 47; max. 72; min. 30. Prec. .85".

Tucumcari.

Max. temp. for week 85 on the 16th; minimum 34 on the 19th.
Average hourly wind velocity 8.2 miles per hour.
Precipitation for the week .09" on the 17th and T on the 18th.
Evaporation 2.710 inches.

While the small shower that occurred this week did not make moisture meet, the cloudy weather which accompanied it lessened the evaporation from the soil. The soil is becoming quite dry down to a depth of six to eight inches.

Spring wheat and oats are in the boot and some few heads are appearing. A good rain would help out all the small grains. They have reached a height of about 14 inches and appear to be standing at that height.

During the week we planted corn, milo, sorghum and broomcorn on our rotation and M. C. plats. We also planted quite a number of the variety plantings and also planted quite a large acreage in our lower field to milo and cowpeas.

Some of the variety corns and sorghums planted last week are coming up well. Cotton is up on all plats.

Soil samples taken this week show that although the surface of the soil is very dry, the subsoil is well filled with moisture.

Williston. Report for week ending May 15, 1915.

The cool weather of the past week together with occasional showers, have done much for the crop and give an excellent prospect.

A total of 1.06 inches of precipitation occurred, .83 inch falling on the 15th and the night of the 14th. Maximum temperature 85 degrees on the 11th, minimum 35 degrees on the 15th. Heavy winds prevailed during the week.

Woodward.

Most of the rotation sorghums planted last week are just emerging from the ground and the stand seems to be good. As usual, however, gophers, moles and field mice are at work and replanting may have to be done on their account. This is probably the very worst station for such damage. We are gradually getting the Station cleaned up so that it looks fairly well, but the continued rains are a very great handicap. During the past week we have had 1.79 inches. Over the past week the ground has been too wet to do any cultivating but a considerable amount of plowing has been done. Some rye hay on the Station and a very considerable amount around the country has been ruined by the wet weather. Wheat is just beginning to head around the country generally and because of the rank growth of straw is going down in the wettest spots. Rust is evident, in some cases to a rather alarming extent. Should the wheat go back there will be a remarkable amount of late planting of sorghums done this year as the acreage is probably smaller than for years, due to most of the land being in wheat.

Mr. Rothgeb arrived today, May 22, from Washington, D. C., and willremain until planting of the sorghums is completed.

Dickinson.

Another week of low average temperature for May has just ended. The absolute maximum for the week was 56 and the absolute minimum 24. The average maximum was 52 while the average minimum was 34. Practically no growth took place during the week. A slight amount of damage was done to flax, and barley and oats were noticeably affected by the freezing temperatures which occurred on three different nights. Green ash trees which were just leafling out were damaged considerably. Other trees and shrubs were damaged to a lesser extent.

The total precipitation for the week was .55 inch.

Flax came thru the early part of the week but did not make a complete emergence owing to the cold weather. A small percentage of plants do not seem to be able to push their way through, perhaps because they have been weakened by the continued cold.

Corn planted on the 7th shows an occasional hill up.

Scottsbluff.

The month of May continues to offer novelties in weather conditions. A heavy gale on the 17th brought on rain during the night, which later turned to snow. Tuesday, we were treated to a full grown blizzard that raged all day long and into the night. Wednesday, more snow fell, bringing the total precipitation up to .82 inch. The snow was wet and heavy and lay 10 to 12 inches deep on the level. Snow still covers the ground, but is being gradually melted away.

Serious injury to crops was feared on account of the extremely low temperatures prevailing. At this date the full damage cannot be determined. About half of the leaves on trees and shrubs are black.

The following table gives an idea of how near we came to winter:

Date	Max.	Min.
16	58	33
17	67	29
18	32	26
19	34	27
20	39	23
21	47	32

Williston.

The past week has been marked for weather exceptionally cool and cloudy, which has held back growth considerably. The earliest planted corn in the ground three weeks ago is just beginning to sprout, some has rotted in the ground, and alfalfa has made no apparent growth for some time. Of course, grains are benefitted to some extent. Maximum temperature was 71; minimum 28; mean about 46. There were three nights of light frost, and three other nights dangerously near it.

No precipitation during the week.

All plats are thrifty, rye, altho seeming thin, is a foot high in the green manure rotations. No corn has emerged as yet. Shallow

Williston, Continued.

sampling was started in the week, and shows a fair amount of moisture within the depth, although rains would be welcome. There is a defiency in the normal precipitation of over two inches to date.

Note.

Financial statements have been sent to all the field stations of this office, and we would like to hear from the field men as soon as possible how much money they will need between now and the end of the fiscal year.

W E E K L Y B U L L E T I N

OF THE OFFICE OF

DRY LAND AGRICULTURE INVESTIGATIONS

BUREAU OF PLANT INDUSTRY

U. S. DEPARTMENT OF AGRICULTURE.

MAY 29, 1915.

Reports for week ending May 29, 1915.

Akron.

The past week has been very wet and cold. Ground was prepared for millet and cane on Monday and Tuesday but a rain Tuesday night and Wednesday stopped field work until Friday noon. Friday and Saturday the soil was too wet to work well. Small grain is growing slowly. Winter rye is beginning to head.

Governor George A. Carlson of Colorado visited the station Saturday.

Precipitation for the week 1.77 in. Maximum temperature 77, minimum 37. Total precipitation for month of May 4.13 inches.

Amarillo.

The first half of the week has been dry and windy. Wednesday clouded up and wound up with rain in the evening which continued with intermittant showers during the night and drizzling squalls the next day accompanied with a strong chilly wind. Total precipitation for the interval was .66 inch. The maximum temperature for the week was 91 on the 25th; minimum 46 on the 27th & 28th. Average mean 68. Avg. hourly wind velocity 9.1 miles. Evaporation was 1.730 inches.

W. Wheat has commenced heading out. It appears to have been damaged more by the frost of the 7th than was at first thought, especially in spots where both blades and top part of stalks are completely withered and dead. However, enough of a stand is still left undamaged to insure fairly good yields barring unforeseen contingencies.

Spring grains have also started heading out this past week. Corn planted on the 15th came thru with a good stand. Kafir and Milo do not appear so certain and may have to be replanted. The cold snap accompanying the recent rainy spell was inopportune for bringing these crops thru to the best advantage.

The Soil Drying House is practically completed and the apparatus will be transferred to it in a day or so.

Archer.

Although precipitation has occurred on three of the past seven days, it has been the most favorable week for crop growth, this season. Heavy winds blew on the 25, 26 and 27th, averaging about 15.0 miles per hour. The average velocity for the 26th was 20.1 miles per hour.

Winter rye is heading at about twenty inches in height while winter wheat is jointing at a height of about 6 inches. Corn and flax were planted on the 24th. The last seeding on this station for this spring is to be done today, May 29. During the past week 9 acres of millet and 9 acres of sorghum for forage have been planted. Also 25 acres of corn for silage.

Plat trimming has been in progress during the week and will be finished the coming week.

Mr. Burr visited the station on the 23 and 24th.

Maximum temperature for the week 78; minimum 35. Precipitation .34 in. while wind velocity was 10.2 miles.

Ardmore.

Maximum temperature for the week 81; minimum 40. Total precipitation for the week 1.30 inches. The total precipitation for the month of May, up to and including the 30th, has been 3.43 inches. The precipitation for the same month last year was 1.24 inches. The precipitation from January 1st to May 30 of this year has been 9.47 inches; for the same months last year it was 5.26 inches. There has been a total of 14 rainy days during the month of May and there were 11 similar days during the month of April. The ground has been so wet that is has been possible to work in the field only 17 days during these two months. It has been possible to work in the field only one day during the present week.

Corn is about two inches high. A good stand was secured but it shows the effect of the continuous cold weather. Small spring grain is doing nicely. Winter wheat is growing slowly. Winter rye is three feet high and has headed out.

Fifteen acres of sorgo have been planted. We hope that the ground will be dry enough to finish planting all forage crops during the coming week.

Alfalfa was frozen back about two inches on the 19th but is recovering nicely.

The soil contains all the moisture that it will carry to a depth of five feet.

Bellefourche.

The roads between series were staked, plowed and graded on Monday and Tuesday. The rain on Wednesday and Thursday kept the soil too wet for any field work to be done, until Saturday afternoon. The spring plowed corn plats and the sorghum plats were harrowed Saturday.

Crops made little growth during the past week.

Winter rye is in vigorous condition and is commencing to head.

Soil samples show that the soil is wet to a depth of about two feet, the third foot still being very dry.

Maximum temperature 84; minimum 41. Precipitation .96 inch.

Edgeley.

Cold cloudy weather has continued thruout the week. Very little field work has been done except to harrow the corn once.

Crops have been making but little growth but are looking well. Apparently the frosts of last week injured a great many of the weeds as the plats do not appear as weedy now as two weeks ago. Not as much damage was done by the frosts to tender vegetation in general as was thought at first.

Flax which was seeded on the 17th emerged about the 27th. The alfalfa and clover which was seeded in April has also emerged during the week. There seems to be a fair stand of clover but the alfalfa is rather thin and may have to be reseeded.

Maximum temperature 67; minimum 34; mean 52. Precipitation .47 inch.

Colby.

Only two days of field work during the last two weeks have been possible. The wet weather of last week continued till Thursday of this week. All crops and weeds have been making good growth in spite of exceptionally cold weather except the Russian thistles. Since the frost on the 21st, the thistles have almost entirely disappeared. That frost consequently, may be considered beneficial as the corn has fully recovered. Winter rye headed out the first of the week and is about 2 feet high. The plowed fallow plats were double disked between rains.

The people had scarcely gotten over congratulating themselves on their narrow escape from frost and snow, when their eyes were opened to another variety of the large assortment of spring weather this country is likely to experience. An electrical, hail, rain, and wind storm rudely awakened sleepers at about two o'clock Sunday morning, May 24, by rocking the houses and showering the occupants with broken glass from the west windows and other debris from nearby windmills and out buildings. The hail merely knocked off and bruised some fruit in this vicinity but elsewhere in the country some damage to crops was done. The rain coming in torrents did much damage by filling lister ditches in places and by forming gullies in others. All sorghums in the ground before the rain will have to be replanted. The wind did the most damage. A number of windmills, windmill wheels, and a great many chimneys were blown down, most of the barns in town were demolished, a blacksmith shop was wrecked, as were two of the garages, and the roof of the O'Pelt Hotel was damaged. I do not believe that a solitary line of fence running north to south was left standing in the whole county. The Russian thistles, piled up and pushed along by the wind, swept everything before them. At the station the wind mill head was blown away, several trees were uprooted or broken, and fences torn down. In the line along the west side of the farm where there were pipe steel posts and in the line along the west side of the pasture where there were angular steel posts not a single post was left standing except the corners which apparently never moved. The wires were a tangled mess about three hundred feet east of their original place. There are no evidences of tornado action. It seems that the damage was done by a straight wind which started as an east wind but rapidly swung to the southwest, west, and northwest, increasing in violence all the while. No record of the velocity was obtained as the anemometer was found motionless in the morning, securely held by a thistle. No one was seriously hurt. The old timers cannot recall such a damaging storm.

Max. temp. for week 84; minimum 37. Avg. hourly wind velocity 7.9 miles. Evaporation 1.02". Rainfall 2.17". Rainfall for May 4.55"; for the year 12.46".

Dalhart.

All of the crops with the exception of the variety sorghums and a few feed plats have been planted. Winter rye is headed out but as yet the wheat oats and barley have not begun to head. Alfalfa is starting to bloom and will be cut Tuesday or Wednesday of next week. The weather has been cool and the crops that have been planted are coming up rather slow. Maximum temp. 92; minimum 45. Total precipitation .81 inch.

Dickinson.

The weather for the week has been cool and cloudy but without any freezing temperatures. The Max. temp. was 72; minimum 35. Total precipitation for the week was 1.61 inches. This makes a total for May of 3.98 inches,- 1.41 inches in excess of the 23 year normal for that month.

Corn planted on the 7th was entirely up on the 25th. Alfalfa and clover sown on the 18th were up on the 28th.

Garden City.

Another rain of 1.15 inches on Thursday delayed planting on a few plats which had not been finished on the preceding day. This rain came down slowly and there was very little run-off.

Prospects for a small grain crop are certainly very promising now.

Barley is heading and wheat is in the boot stage.

On the 29th the plats on the project were lined out and the roads mowed.

Corn planted on the 17th is now coming up. The seed was put in a little too deep for the wet cool weather following and the young plants have a yellow appearance at time of emerging from the soil.

The pumping plant on the station is now ready for operation and pumping will probably be started this week.

At no time has the soil been wet more than twenty inches in depth, but more rain has come at the proper time to prevent serious injury.

Because of the cool wet weather we have been having, seeding of the sorghum crops has just been finished.

Max. temp. 90; minimum 39. Evaporation 1.709".

Avg. wind vel. 2' anemometer 10.2; 8' anemometer 12.8.

Hays.

The past week has been another cloudy rainy week, which permitted of no field work.

Winter wheat, oats and barley are beginning to head,-all small grains are looking fine. Average height of winter wheat is little better than two feet. All spring small grains are eighteen or more inches. A thicker and heavier growth of spring grains has never been recorded at this station. Alfalfa is about twenty inches high and beginning to blossom. A fairly good stand of alfalfa has been secured on the plat seeded this spring. Also a fair stand of brome has been secured.

Corn has a poor color due to wet and cool weather and is making slow growth. Surface planted sorghums are up and a good stand has been secured. Listed sorghums are coming up slow. It is still a little early to determine if these plats will need to be planted over.

Max. temp. 85; minimum 42. Precipitation, the total of several showers, 1.52 inches.

Hettinger.

The weather has continued cool and unfavorable for plant growth. The rains that have come have been light but enough to make work in the field disagreeable. Heavy frosts affected everything that was up. Early corn was frozen to the ground. In fact until the last couple of days seed corn was better in the crib than in the ground.

The station and the better farming agent got together and devised a two row alfalfa planter that is doing good work. It consists of a sled with adjustable runners which can be set for any width of row desired. The heels of these runners are supplied with common cultivator shovels which can be set at any height or angle. These open a furrow and clear away rubbish. Next follows large size garden planters which have two wheels set on axles wide enough so that they will not need steadying. The fertilizer attachment distributes the inoculating soil in the opened furrow at the rate of 35# per acre. The seed is seeded right into this dirt at the rate of 15 seeds to the foot. In this way the inoculating soil is placed next to the seed and none is wasted. The seeds are placed at a uniform depth and spacing and in soil that is well packed giving the alfalfa seeds a better chance than the weeds between the rows.

Maximum temperature 59; minimum 24. Precipitation .28".

Judith Basin.

All spring grains are growing nicely in spite of the cold weather that has been prevelent the past two weeks. Almost perfect stands have been secured on all plats. Corn is coming up. Unless we have unusual severe frosts in June, the early planting for corn will work out more satisfactorily than planting in May or June as we have done in previous years. In fact crop prospects on plats and in our large fields were never as good as they are at present at this station. However, we are not making any predictions as to yields before July 15th.

Trees around the station buildings have made an unusual good growth this spring. Three hundred and fifty additional trees were planted this spring. The plantings consisted mostly of Canadian Poplar and Siberian Pea Trees.

Thirty acres of additional plat work have been started with Forage crops by Mr. Moomaw of the Forage Crop Office. This makes a total of one hundred and twenty acres in plat work at this station. Our work from date to harvesting time will be trying to get the above acreage of plats trimmed, roads graded, weeds pulled and stakes for plats set up, also the plowing of one hundred and thirty acres of fallow in our commercial field.

The station well has been dry for the past week. At present we are hauling water one and one-half miles for house use and for watering twelve head of horses.

Total precipitation for May 1.91 inches.

North Platte.

Cold, wet weather has continued thruout the week. It has been possible to plant corn but one-half day during the week, while but two days' planting were done the week preceding. About one-half of the corn in the vicinity is planted. Plantings made previous to the 10th are up. Plantings made from the 10th to 17th will probably have to be replanted. Corn has been planted on the rotation plats for 16 days and but few plants have emerged.

Rainfall for the week 4.73 inches. The rivers are bank full and much low land is under water. Rainfall for April and May has been approximately 13 inches; since January 1 about 16.5 inches, which is only 2 inches less than the normal annual rainfall.

Scottsbluff.

The week has been cold and unfavorable for plant growth. Precipitation amounting to 1.20 inch in the form of hail and rain, driven by a heavy wind occurred on the 24th. Much of it was lost in the run-off. Many of the alfalfa fields were beaten flat to the ground. The hail finished up what the frost left of the cane, so that crop will have to be replanted. East of us, a cyclone is reported to have damaged several buildings and killed one man at Oshkosh.

Soil sampling shows the first four feet of soil to be well filled, and in some cases, the fifth foot carries considerable moisture.

Today the weeder is being run over all cropped plats and the spring tooth harrow over the fallowed plats to break up the crust.

Maximum temperature for the week 77; minimum 37. Precipitation 1.39".

Tucumcari.

Max. temp. for week 95 on the 25th; minimum 49 on the 27th & 28th.
Average hourly wind velocity 7.4 miles.
Precipitation for the week 1.19 inches.
Evaporation for the week 2.224 inches.

On the 26th the dry "spell" of the past couple of weeks was broken. The precipitation came in the form of hail and rain. The hail did considerable damage to the cotton and to melons- just how much damage we are unable to tell yet. Only about one-half of the leaves were knocked off and it is probable that they will recover. Before the rain the small grains were firing considerably. They are looking fine now, although the growth is rather short. The spring and winter wheat is in the boot and some is heading, and the oats and barley are headed.

All crops planted so far are up and looking well. The ground is in fine shape and once the crops get a good start there should be no trouble in making good yields again this year.

The principle work of the work has consisted of road work and planting.

Williston.

The past week has been favorable for all crop growth. It has warmed up to some extent, precipitation totalling 1.02 inches fell, and the evaporation has been relatively small.

All plats are making good growth, and are of even stand and thrifty. The oats are somewhat thin, but vigorous. The rye on the green manure plats is already heading, though less than two feet high, and is thin. This is due to the dry weather early in the month and the last part of April. Corn is emerging nicely.

Minimum temperature 37; maximum 78; mean 52.

Woodward.

The work on the Station over the past week has been the planting of the grain sorghums and the disking and cultivating of the roads. There has been 2.26 inches of rain this week. The continued rains since the planting of the grain sorghums on the rotation plats has made it necessary to replant these in large part. As is usual, moles are working to a great extent on the plats. The damage appears to be greater than it was last year. The continued moist weather is making the prospects for wheat look very bright and rust apparently is not a very serious menace.

Oats for some unexplained reason are dragging along slowly and appear to be making very little growth. This is probably due to the very backward weather we are having.

Note.

Some of the men have failed to send in their financial requirements for the balance of this fiscal year. Please get these statements in as soon as possible.